

Appendix B

Inventory of Nonindigenous Aquatic Species Occurring in the Gulf of Mexico Region

*An Initial Survey of Aquatic Invasive Species Issues
in the Gulf of Mexico Region*

Invasive Species Focus Team
Gulf of Mexico Program

Version 4.0

Inventory of Nonindigenous Aquatic Species Occurring in the Gulf of Mexico Region

September 2000

This inventory attempts to comprehensively identify those nonindigenous species that exist in all freshwater, estuarine, and marine environments in the Gulf of Mexico region, by Gulf State. This initial iteration of the inventory focuses on aquatic microbes, non-insect aquatic invertebrates, fishes, amphibians, aquatic reptiles, aquatic mammals, algae, aquatic plants, and semi-aquatic plants; this iteration does not inventory nonindigenous aquatic birds and aquatic insects, or any terrestrial species, in the Gulf region. It is anticipated that the inventory will be expanded and updated for future versions of this "living document." Information sources for each entry in the inventory are provided in the **Info Source** column. **Note that an empty cell in the inventory does not necessarily mean that the species in question does not occur in the given state.**

"Aquatic Ecosystem" Legend

- FW = Freshwater
- E = Estuarine (i.e., tidally influenced)
- M = Marine
- B = Beach/barrier island

Occurrence Legend

- X = Reported, but not known to be established
- E = Established
- E1 = Formerly established but extirpated
- N = Native to the state
- N/T = Native to one area of the state but transplanted to a non-native area

“Info Source” Legend

Byrd	Byrd, Jr., J.D. and C.T. Bryson. 1999. Biology, Ecology, and Control of Cogongrass [<i>Imperata cylindrica</i> (L.) Beauv.]. Fact Sheet 1999-01 published by the Mississippi Department of Agriculture and Commerce, Bureau of Plant Industry in cooperation with USDA, Animal and Plant Health Inspection Service, Plant Pest Quarantine.
Carlton	Carlton, J.T. and M.H. Ruckelshaus. 1997. Nonindigenous Marine Invertebrates and Algae. In: Simberloff, D., D.C. Schmitz, and T.C. Brown (Des). 1997. Strangers in Paradise: Impact and Management of Nonindigenous Species in Florida. Island Press, Washington, D.C.
Cox	Cox, G.W. 1999. Alien Species in North America and Hawaii: Impacts on Natural Systems. Island Press, Washington, D.C.
DISL	Dauphin Island Sea Lab website (http://www.disl.org/%7Emgraham/phyllorhiza.htm).
FEPPC	Florida Exotic Plant Pest Council website (http://www.fleppc.org/)
Fuller	Fuller, P.L., L.G. Nico, and J.D. Williams. 1999. Nonindigenous Fishes Introduced into Inland Waters of the United States. American Fisheries Society Special Publication No. 27. Bethesda, MD. 613 pp.
IFAS	University of Florida, IFAS, Center for Aquatic and Invasive Plants, Aquatic, Wetland and Invasive Plant Information System, Invasive Nonindigenous Plants of Florida website (http://aquat1.ifas.ufl.edu/photos.html)
JSA	JSA (Joint Subcommittee on Aquaculture Shrimp Virus Work Group). 1997. <i>An Evaluation of Potential Shrimp Virus Impacts on Cultured Shrimp and Wild Shrimp Populations in the Gulf of Mexico and Southeastern U.S. Atlantic Coastal Waters</i> . Prepared by the JSA Shrimp Virus Work Group. June 5, 1997.
McCann	McCann, J.A., Arkin, L.N., and Williams, J.D. <i>Nonindigenous Aquatic and Terrestrial Species of Florida: Status, Pathway and Time of Introduction, Present Distribution, and Significant Ecological and Economic Effects</i> . Southeastern Biological Science Center, National Biological Service. Published on the Internet (http://aquat1.ifas.ufl.edu/mctitle.html), March 1996, by the University of Florida, Center for Aquatic Plants.
McCarthy	Susan McCarthy, Gulf Coast Seafood Laboratory, U.S. Food and Drug Administration, personal communication.
Minton	Minton, R.V. 2000. Nonindigenous Species in Coastal Alabama. Presentation summary distributed at the Nonindigenous Species Focus Group Panel Session at the Gulf of Mexico Symposium, Mobile, Alabama, April 10-12, 2000.
NRCS	U.S. Department of Agriculture, National Resources Conservation Service. 1999. The PLANTS database (http://plants.usda.gov/plants). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.
Peterson	Peterson, P. Jellyfish scourge invades sound. <i>The SunHerald</i> . July 20, 2000.
SJRWMD	SJRWMD (St. John's River Water Management District). 1999. Blue-green algae in Florida waters: Effects on water quality. A “Fast Facts” sheet produced by the St. John's River Water Management District. August 1999.
Thompson	Thompson, B.A. 2000. Intruders in the House: An Update on Some of the Exotic Species of Louisiana. Presentation summary distributed at the Nonindigenous Species Focus Group Panel Session at the Gulf of Mexico Symposium, Mobile, Alabama, April 10-12, 2000.
USM	University of Southern Mississippi, Gulf Coast Research Laboratory Museum, Nonindigenous Species in the Gulf of Mexico Ecosystem website (http://lionfish.ims.usm.edu/~musweb/invaders.html).
USGS	USGS Nonindigenous Aquatic Species website (http://nas.er.usgs.gov).

Internet-Based “Summary Citation” Legend

- FEPPC Florida Exotic Plant Pest Council website (<http://www.fleppc.org/>).
- IFAS University of Florida, IFAS, Center for Aquatic and Invasive Plants, Aquatic, Wetland and Invasive Plant Information System, Invasive Nonindigenous Plants of Florida website (<http://aquat1.ifas.ufl.edu/invasive.html>).
- McCann McCann, J.A., L.N. Arkin, and J.D. Williams. *Nonindigenous Aquatic and Terrestrial Species of Florida: Status, Pathway and Time of Introduction, Present Distribution, and Significant Ecological and Economic Effects*. Southeastern Biological Science Center, National Biological Service. Published on the Internet (<http://aquat1.ifas.ufl.edu/mctitle.html>), March 1996, by the University of Florida, Center for Aquatic Plants.
- NRCS U.S. Department of Agriculture, National Resources Conservation Service. 1999. The PLANTS database (<http://plants.usda.gov/plants>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.
- USM University of Southern Mississippi, Gulf Coast Research Laboratory Museum, Nonindigenous Species in the Gulf of Mexico Ecosystem website (<http://lionfish.ims.usm.edu/~musweb/invaders.html>).
- USGS USGS Nonindigenous Aquatic Species website (<http://nas.er.usgs.gov>).

1.0 MICROBES

1.1 Shrimp Viruses

Name	Aquatic Ecosystem			Reported (X), Established (E)					Info Source	Summary Citation
	FW	E	M	FL	AL	MS	LA	TX		
Infectious Hypodermal and Hematopoietic Necrosis Virus (IHHNV) *		√	√	X				X	JSA	USM
Taura Syndrome Virus (TSV) *		√	√					X	USM	USM
White Spot Syndrome Virus (WSSV) *		√	√					X	USM	USM

* = exotic

1.2 Bacteria

Scientific Name	Common Name	Aquatic Ecosystem			Reported (X), Established (E)					Info Source	Summary Citation
		FW	E	M	FL	AL	MS	LA	TX		
<i>Mycobacterium marinum</i> (C)				√	X					McCann	
<i>Vibrio cholerae</i> , serotype Inaba, biotype El Tor *	cholera		√		X	X				McCarthy	
<i>Vibrio parahaemolyticus</i> (including O3:K6 strain *)			√	√					X	McCarthy	

* = exotic

C = cryptogenic

1.3 Protozoa

Scientific Name	Common Name	Aquatic Ecosystem			Reported (X), Established (E)					Info Source	Summary Citation
		FW	E	M	FL	AL	MS	LA	TX		
<i>Dermocystidium koi</i> *	a common carp parasite	√			X					McCann	
<i>Ichthyophthirius multifiliis</i> *	ich	√			X					McCann	
<i>Mitraspora cyprini</i> *		√			X					McCann	
<i>Myxosoma (Lentospora) cerebralis</i> *	whirling disease	√				X	X	X	X	USM	USM
<i>Oodinium pilularis</i>	rust or gold disease									USM	
<i>Pleistophora hypohessobryconis</i>	a fish muscle parasite	√								USM	
<i>Protopalina symphysodonis</i>										USM	
<i>Sphaerospora carassii</i> *	a gill pathogen	√			X					McCann	
<i>Spironucleus elegans</i>		√			X					McCann	
<i>Trichodina reticulata</i> *	a goldfish parasite	√				X	X	X		McCann	
<i>Trichodina subtilis</i> *	a gill parasite	√			X					McCann	
<i>Trichodinella epizootica</i> *	a goldfish parasite	√			X					McCann	

* = exotic

1.4 Fungi

None identified in this survey.

2.0 INVERTEBRATES

2.1 Tunicates

Scientific Name	Common Name	Aquatic Ecosystem			Reported (X), Established (E)					Info Source	Summary Citation
		FW	E	M	FL	AL	MS	LA	TX		
<i>Botryllus niger</i> (C)	a sea squirt			√	X					Carlton	
<i>Botryllus schlosseri</i> *	a sea squirt			√	E					USGS	
<i>Diademnum perleucidum</i> *	a tunicate			√					E	USGS	
<i>Styela plicata</i> *	a sea squirt			√	E					USGS	

* = exotic

C = cryptogenic

2.2 Bryozoans

Scientific Name	Common Name	Aquatic Ecosystem			Reported (X), Established (E)					Info Source	Summary Citation
		FW	E	M	FL	AL	MS	LA	TX		
<i>Conopeum "seurati"</i> (C)	a bryozoan			√	X					Carlton	
<i>Cryptosula pallasiana</i> *	a bryozoan			√	X					Carlton	
<i>Sundanella sibogae</i> *	a bryozoan			√	E					USGS	
<i>Victorella pavida</i> *	a bryozoan			√	E					USGS	
<i>Watersipora subovoidea</i> *	a bryozoan			√	X					Carlton	
<i>Zoobotryon verticillatum</i> (C)	a bryozoan			√	X					Carlton	

* = exotic

C = cryptogenic

2.3 Sponges

None identified in this survey.

2.4 Coelenterates

Scientific Name	Common Name	Aquatic Ecosystem			Reported (X), Established (E)					Info Source	Summary Citation
		FW	E	M	FL	AL	MS	LA	TX		
<i>Cordylophora caspia</i> *	a hydriod			√	E					USGS	USGS
<i>Diadumene lineata</i> *	orange-striped anemone			√	E					USGS	USGS
<i>Phyllorhiza punctata</i> *	a scyphoid jellyfish			√		X	X	X		Peterson, DISL	USGS

* = exotic

2.5 Flatworms (Phylum Platyhelminthes)

Scientific Name	Common Name	Aquatic Ecosystem			Reported (X), Established (E)					Info Source	Summary Citation
		FW	E	M	FL	AL	MS	LA	TX		
<i>Anacanthorus anacanthorus</i> *	red piranha gill parasite	√			X					McCann	
<i>Bolbophorus confusus</i> *	Eurasian strigeid trematode	√	√		X					McCann	
<i>Bothriocephalus opsarichthydis</i> *	great Asian tapeworm	√								USM	USM
<i>Cichlidogyrus spp.</i> *	tilapia gill parasite	√			X					McCann	
<i>Cleidodiscus amazonensis</i>	gill fluke									USM	
<i>Cryptocotyle lingua</i> *	marine blackspot			√						USM	USM
<i>Dactyogyrus vastator</i>	goldfish gill parasite	√								USM	
<i>Gyrodactylus elegans</i>	goldfish skin fluke	√								USM	
<i>Longihaptor longihaptor</i> *	common carp gill parasite	√			X					McCann	
<i>Pseudocolpenteron pavlovskiyi</i>	common carp parasite	√								McCann	
<i>Taenioplana teredini</i>	a flatworm			√	X					Carlton	
<i>Urocleidoides amazonensis</i> *	redtail catfish gill parasite	√			X					McCann	
<i>Urocleides crescentis</i> *	red piranha parasite	√			X					McCann	
<i>Urocleidoides reticulatus</i>	guppy parasite	√								USM	

* = exotic

2.6 Roundworms (Phylum Nematoda)

Scientific Name	Common Name	Aquatic Ecosystem			Reported (X), Established (E)					Info Source	Summary Citation
		FW	E	M	FL	AL	MS	LA	TX		
<i>Anguillicola crassus</i> *	eel parasite	√	√	√					E	USM	USM
<i>Camallanus cotti</i> *		√			X					McCann	
<i>Philometra sanguinea</i> *	goldfish parasite	√			X					McCann	

* = exotic

2.7 Segmented Worms (Phylum Annelida)

Scientific Name	Common Name	Aquatic Ecosystem			Reported (X), Established (E)					Info Source	Summary Citation
		FW	E	M	FL	AL	MS	LA	TX		
<i>Boccardiella ligERICA</i> *	a polychaete worm			√	E					USGS	
<i>Hydroides elegans</i> *	a polychaete worm			√	E					USGS	

* = exotic

2.8 Mollusks

Scientific Name	Common Name	Aquatic Ecosystem			Reported (X), Established (E), Native (N), Formerly established but extirpated (E1)					Info Source	Summary Citation
		FW	E	M	FL	AL	MS	LA	TX		
<i>Biomphalaria glabrata</i>	bloodfluke planorb	√			E					USGS	
<i>Cipangopaludina chinensis</i> *	Chinese mysterysnail	√			E				E	USM	USM
<i>Corbicula fluminea</i> *	Asian clam	√			E	E	E	E	E	USGS	USM, USGS
<i>Cuthona perca</i>	Lake Merrit cuthona			√	E					USGS	
<i>Dreissena polymorpha</i> *	zebra mussel	√				E	E	E		USGS	USGS
<i>Ercolania fuscovittata</i>	a California nudibranch			√	N					USGS	
<i>Lyrodus medilobatus</i>	an Indo-pacific shipworm			√	E					USGS	
<i>Marisa cornuarietis</i> *	giant rams-horn snail	√			E				E	USM	USM
<i>Melanoides tuberculata</i> *	red-rimmed melania	√			E			X	E	USM, Thompson	USM
<i>Melanoides turriculus</i>	fawn melania	√			E					USGS	
<i>Myosotella myosotis</i>	marsh snail	√			E					USGS	
<i>Mytella charruana</i> *	charru mussel	√			E1					USGS	
<i>Ovatella myosotis</i> *	European salt-marsh snail		√		X					Carlton	
<i>Perna perna</i> *	brown mussel			√					E	USM	USM
<i>Perna viridis</i> *	green mussel			√	E					USM	USM
<i>Pinctada margaritifera</i>	black-lipped pearl oyster			√	E					USGS	
<i>Pomacea bridgesi</i>	spiketop applesnail	√			E					USM	USM
<i>Pomacea canaliculata</i>	channeled applesnail	√			E					USM	USM
<i>Pomacea paludosa</i>	Florida applesnail	√			N	E			E	USM	USM
<i>Rangia cuneata</i>	Atlantic rangia		√	√	E					USGS	
<i>Siphonaria pectinata</i>	striped falselimpet			√	E					USGS	
<i>Stenophysa marmorata</i>	marbled aplexa	√							E	USGS	
<i>Stenophysa maugeriae</i>	twany aplexa	√							E	USGS	
<i>Tarebia granifera</i> *	quilted melania	√			E				E	USM	USM
<i>Tridacna crocea</i> *	giant clam			√	X					USGS	
<i>Tridacna maxima</i> *	giant clam			√	X					USGS	

* = exotic

2.9 Crustaceans

Scientific Name	Common Name	Aquatic Ecosystem			Reported (X), Established (E)					Info Source	Summary Citation
		FW	E	M	FL	AL	MS	LA	TX		
<i>Argulus japonicus</i> *	a branchiuran				X					McCann	
<i>Artystone japonicus</i> *	a parasitic isopod	√			X					McCann	
<i>Balanus amphitrite</i> *	striped barnacle			√	X					USM	USM
<i>Balanus reticulatus</i> *	a barnacle			√	X					USM	USM
<i>Balanus trigonus</i> *	a barnacle			√	E			E	E	USM	USM
<i>Centropages typicus</i> *	a copepod			√		X			X	USGS	
<i>Charybdis hellerii</i> *	Portunid crab		√	√	E					USM	USM
<i>Chelura terebrans</i> *	an amphipod			√	X					USGS	
<i>Daphnia lumholtzi</i> *	water flea	√			E	E	E	E	E	USGS	USGS
<i>Eriocheir sinensis</i> *	Chinese mitten crab		√	√				X		USM	USM
<i>Gnathophyllum modestum</i>	potted bumblebee shrimp			√						USGS	
<i>Lernaea cyprinacea</i>	anchorworm; parasitic copepod	√								USM	USM
<i>Ligia exotica</i> *	an isopod			√	X					USGS	
<i>Limnoria pfefferi</i> (C)	an isopod			√	X					Carlton	
<i>Limnoria saseboensis</i> (C)	an isopod			√	X					Carlton	
<i>Lironeca symmetrica</i> *	a parasitic isopod	√			X					McCann	
<i>Litopenaeus vannamei</i> *	Pacific white shrimp	√	√	√	X				E	USM	USM
<i>Macrobrachium olfersii</i>	bristled river shrimp	√			X			X		USM	USM
<i>Orconectes virilis</i>	virile crayfish	√				X	X			USGS	
<i>Palaemon africanus</i> *	African prawn	√			X					USGS	
<i>Petrolisthes armatus</i> *	anomuran crab	√			X					USGS	
<i>Penaeus monodon</i> *	jumbo tiger prawn			√	X				X	USM	USM
<i>Platychirograpsus spectabilis</i> *	saber crab	√			X					USM	USM
<i>Polyacanthorhynchus kenyensis</i> *	liver parasite	√			X					McCann	
<i>Scylla serrata</i> *	serrated swimming crab; Somoan crab			√	X					USM	USM
<i>Sphaeroma terebrans</i> *	a wood-boring isopod, gribble			√	X			X		USGS, Thompson	
<i>Sphaeroma walkeri</i> *	an isopod			√	X					USGS	
<i>Zeuxo maledivensis</i> *	a tanaid			√	X					USGS	

* = exotic

C = cryptogenic

3.0 VERTEBRATES

3.1 Fishes

Scientific Name	Common Name	Aquatic Ecosystem			Reported (X), Established (E), Formerly established but extirpated (E1), Native (N), Native to one area of the State but transplanted to a non-native area (N/T)					Info Source	Summary Citation
		FW	E	M	FL	AL	MS	LA	TX		
<i>Aequidens pulcher</i> *	blue acara	√			X					Fuller	USGS
<i>Alosa aestivalis</i>	blueback herring	√			N				E	Fuller	USGS
<i>Alosa sapidissima</i>	American shad	√			N	E	E1	E1	E1	Fuller	USGS
<i>Ambloplites rupestris</i>	rock bass	√				N	N		E	Fuller	USGS
<i>Ameiurus catus</i>	white catfish	√			E, N/T	E, N/T	E, N/T			Fuller	USGS
<i>Ameiurus melas</i>	black bullhead	√				N	N	N	E, N/T	Fuller	USGS
<i>Ameiurus nebulosus</i>	brown bullhead	√			N	E, N/T	N	E, N/T		Fuller	USGS
<i>Ammocrypta bifascia</i>	Florida sand darter	√			E, N/T	N				Fuller	USGS
<i>Anabas testudineus</i> *	Climbing perch	√			E1					Fuller	USGS, USM
<i>Aphyocharax anisitsi</i> *	bloodfin tetra	√			X					Fuller	USGS
<i>Archoplites interruptus</i>	Sacramento perch	√							X	Fuller	USGS
<i>Astronotus ocellatus</i> *	oscar	√			E		X	X	X	Fuller	USGS, USM
<i>Astyanax mexicanus</i>	Mexican tetra	√						X	E, N/T	Fuller	USGS
<i>Belonesox belizanus</i> *	pike killifish	√			E					Fuller	USGS, USM
<i>Betta splendens</i> *	Siamese fighting fish	√			X					Fuller	USGS, USM
<i>Brachydanio rerio</i> *	zebra danio	√			X					Fuller	USGS, USM
<i>Callichthys callichthys</i> *	cascaudo	√			X					Fuller	USGS
<i>Campostoma oligolepis</i>	largescale stoneroller	√				X, N/T	N			Fuller	USGS
<i>Carassius auratus</i> *	goldfish	√			X	E	E	E	E	Fuller	USGS, USM
<i>Carassius carassius</i>	crucian carp	√							X	Fuller	USGS
<i>Chirostoma jordani</i>	charal	√							X	Fuller	USGS
<i>Chitala ornata</i> *	clown knife	√			E					Fuller	USGS
<i>Cichla ocellaris</i> *	peacock cichlid; butterfly peacock	√			E					Fuller	USGS, USM
<i>Cichla temensis</i> *	speckled pavon	√			X				X	Fuller	USGS

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		FW	E	M	FL	AL	MS	LA	TX		
<i>Cichlasoma bimaculatum</i> *	black acara	√			E					Fuller	USGS, USM
<i>Cichlasoma citrinellum</i> *	Midas cichlid	√			E					Fuller	USGS, USM
<i>Cichlasoma cyanoguttatum</i>	Rio Grande cichlid	√			E		E	E, N/T		Fuller	USGS, USM
<i>Cichlasoma managuense</i> *	jaguar guapote	√			E					Fuller	USGS, USM
<i>Cichlasoma meeki</i> *	firemouth cichlid	√			E					Fuller	USGS, USM
<i>Cichlasoma nigrofasciatum</i> *	convict cichlid	√			X				X	Fuller	USGS, USM
<i>Cichlasoma octofasciatum</i> *	Jack Dempsey	√			E					Fuller	USGS, USM
<i>Cichlasoma salvini</i> *	yellowbelly cichlid	√			E					Fuller	USGS, USM
<i>Cichlasoma trimaculatum</i> *	threespot cichlid	√			E1					Fuller	USGS
<i>Cichlasoma urophthalmus</i> *	Mayan cichlid	√			E					Fuller	USGS, USM
<i>Clarias batrachus</i> *	walking catfish	√			E					Fuller	USGS, USM
<i>Colisa labiosa</i> *	thicklipped gourami	√			X					Fuller	USGS
<i>Colisa lalia</i> *	dwarf gourami	√			X					Fuller	USGS
<i>Colossoma macropomum</i> *	tambaquí	√			X				X	Fuller	USGS
<i>Colossoma/Piaractus sp.</i> *	unidentified pacu	√			X		X	X		Fuller	USGS
<i>Corydoras sp.</i> *	corydoras	√			X					Fuller	USGS
<i>Ctenopharyngodon idella</i> *	grass carp	√			X	X	E	E	E	Fuller	USGS, USM
<i>Ctenopharyngodon idella</i> * x <i>Hypophthalmichthys nobilis</i> *	grass carp x silver carp	√							X	Fuller	USGS
<i>Culaea inconstans</i>	brook stickleback	√				X				Fuller	USGS
<i>Cynoscion nebulosus</i>	spotted seatrout		√	√	N	N	N	N	X, N/T	Fuller	USGS
<i>Cynoscion nebulosus</i> x <i>C. xanthulus</i> *	spotted seatrout x orangemouth corvina		√	√					X	Fuller	USGS
<i>Cynoscion xanthulus</i> *	orangemouth corvina	√							X	Fuller	USGS
<i>Cyprinella lutrensis</i>	red shiner	√				E	N	N	N	Fuller	USGS
<i>Cyprinodon rubrofluvialilis</i>	Red River pupfish	√							E, N/T	Fuller	USGS

Scientific Name	Common Name	Aquatic Ecosystem			Reported (X), Established (E), Formerly established but extirpated (E1), Native (N), Native to one area of the State but transplanted to a non-native area (N/T)					Info Source	Summary Citation
		FW	E	M	FL	AL	MS	LA	TX		
<i>Cyprinodon variegatus</i>	sheepshead minnow	√	√	√	N	N	N	N	E, N/T	Fuller	USGS
<i>Cyprinus carpio</i> *	common carp	√			E	E	E	E	E	Fuller	USGS, USM
<i>Danio malabaricus</i> *	Malabar danio	√			X					Fuller	USGS
<i>Dorosoma petenense</i>	threadfin shad	√			N	E, N/T	N	N	N	Fuller	USGS
<i>Enneacanthus gloriosus</i>	bluespotted sunfish	√			N	N	E, N/T			Fuller	USGS
<i>Esox lucius</i>	northern pike	√							X	Fuller	USGS
<i>Esox lucius</i> x <i>E. masquinongy</i>	tiger muskellunge	√							X	Fuller	USGS
<i>Esox masquinongy</i>	muskellunge	√				E			X	Fuller	USGS
<i>Esox niger</i>	chain pickerel	√			E, N/T	N	N	N	E, N/T	Fuller	USGS
<i>Etheostoma edwini</i>	brown darter	√			E, N/T	N				Fuller	USGS
<i>Etheostoma nuchale</i>	watercress darter	√				E, N/T				Fuller	USGS
<i>Fundulus chrysotus</i>	golden topminnow	√			N	N	N	N	E, N/T	Fuller	USGS
<i>Fundulus grandis</i>	gulf killifish	√	√	√	N	N	N	N	E, N/T	Fuller	USGS
<i>Fundulus lineolatus</i>	lined topminnow	√			X, N/T					Fuller	USGS
<i>Fundulus seminolis</i>	Seminole killifish	√			X, N/T					Fuller	USGS
<i>Fundulus zebrinus</i>	plains killifish	√							E, N/T	Fuller	USGS
<i>Gambusia affinis</i>	western mosquitofish	√			E, N/T	E, N/T	E, N/T	N	E, N/T	Fuller	USGS
<i>Gambusia geiseri</i>	largespring gambusia	√							E, N/T	Fuller	USGS
<i>Gambusia holbrooki</i>	eastern mosquitofish	√			N	E, N/T	E, N/T			Fuller	USGS
<i>Geophagus brasiliensis</i>	pearl eartheater	√			X					Fuller	USGS
<i>Geophagus surinamensis</i> *	redstriped eartheater	√			E					Fuller	USGS, USM
<i>Gobiosoma bosc</i>	naked goby	√	√	√	N	N	N	N	X, N/T	Fuller	USGS
<i>Gymnocorymbus ternetzi</i> *	black tetra	√			X					Fuller	USGS
<i>Helostoma temminckii</i> *	kissing gourami	√			X					Fuller	USGS, USM
<i>Hemichromis letourneauxi</i> *	jewelfish	√			E					Fuller	USGS, USM
<i>Heros severus</i> *	banded cichlid	√			E					Fuller	USGS
<i>Hoplias malabaricus</i> *	trahira	√								Fuller	USGS, USM
<i>Hoplosternum littorale</i> *	brown hoplo	√			E					Fuller	USGS, USM
<i>Hybopsis winchelli</i>	clear chub	√			X, N/T	N				Fuller	USGS
<i>Hyphessobrycon serpae</i> *	serpae tetra	√			X					Fuller	USGS

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		FW	E	M	FL	AL	MS	LA	TX		
<i>Hypophthalmichthys molitrix</i> *	silver carp	√			X	X		E		Fuller	USGS, USM
<i>Hypophthalmichthys molitrix</i> * x <i>H. nobilis</i> *	silver carp x bighead carp	√				X				Fuller	USGS
<i>Hypophthalmichthys nobilis</i> *	bighead carp	√			X	X	E	E	X	Fuller	USGS, USM
<i>Hypostomus spp.</i> *	suckermouth catfish	√			X			X	E	Fuller	USGS, USM
<i>Ictalurus furcatus</i>	blue catfish	√			E	E, N/T	N	N	N	Fuller	USGS
<i>Ictalurus punctatus</i>	channel catfish	√			N	N	N	N	E, N/T	Fuller	USGS
<i>Ictiobus cyprinellus</i>	bigmouth buffalo	√				X, N/T	N	N	N	Fuller	USGS
<i>Jordanella floridae</i>	flagfish	√			X, N/T					Fuller	USGS
<i>Labeotropheus sp.</i>	scrapemouth cichlid	√			X					Fuller	USGS
<i>Lates angustifrons</i> *	Tanganyika lates	√							X	Fuller	USGS
<i>Lates mariae</i> *	bigeye lates	√							X	Fuller	USGS
<i>Lates niloticus</i> *	Nile perch	√							X	Fuller	USGS
<i>Leiostomus xanthurus</i>	spot		√	√	N	N	N	N	E1, N/T	Fuller	USGS
<i>Lepomis auritus</i>	redbreast sunfish	√			N	E, N/T		E	E	Fuller	USGS
<i>Lepomis cyanellus</i>	green sunfish	√			E	E, N/T	N	N	N	Fuller	USGS
<i>Lepomis cyanellus</i> x <i>L. macrochirus</i>	green sunfish x bluegill	√					X			Fuller	USGS
<i>Lepomis humilis</i>	orangespotted sunfish	√			E	E, N/T	N	N	N	Fuller	USGS
<i>Lepomis macrochirus</i>	bluegill	√			N	N	N	N	E, N/T	Fuller	USGS
<i>Lepomis microlophus</i>	redear sunfish	√			N	N	N	N	E, N/T	Fuller	USGS
<i>Lepomis miniatus</i>	redspotted sunfish	√				N	N	N	E, N/T	Fuller	USGS
<i>Leporinus fasciatus</i> *	banded leporinus	√			X					Fuller	USGS
<i>Leuciscus idus</i> *	ide	√							X	Fuller	USGS
<i>Lucania parva</i>	rainwater killifish	√			N	N	N	N	E, N/T	Fuller	USGS
<i>Luxilus chrysocephalus</i>	striped shiner	√			X, N/T	X, N/T	N	N	N	Fuller	USGS
<i>Luxilus zonistius</i>	bandfin shiner	√			N	E, N/T				Fuller	USGS
<i>Lythrurus ardens</i>	rosefin shiner	√				E, N/T	N			Fuller	USGS
<i>Lythrurus atrapiculus</i>	blacktip shiner	√			N	X, N/T				Fuller	USGS
<i>Macropodus opercularis</i> *	paradisefish	√			X			X		Fuller	USGS
<i>Megalops atlanticus</i>	tarpon			√	N	N	N	N	X, N/T	Fuller	USGS
<i>Membras martinica</i>	rough silverside		√	√	N	N	N	N	E, N/T	Fuller	USGS
<i>Menidia beryllina</i>	inland silverside	√			N	N	N	N	E, N/T	Fuller	USGS
<i>Metynnis sp.</i> *	metynnis	√			X					Fuller	USGS

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		FW	E	M	FL	AL	MS	LA	TX		
<i>Micropogonias undulatus</i>	Atlantic croaker			√	N	N	N	N	E1, N/T	Fuller	USGS
<i>Micropterus coosae</i>	redeye bass	√				N			E	Fuller	USGS
<i>Micropterus dolomieu</i>	smallmouth bass	√				E, N/T	E, N/T		E	Fuller	USGS
<i>Micropterus punctulatus</i>	spotted bass	√			E, N/T	E, N/T	N	N	E, N/T	Fuller	USGS
<i>Micropterus salmoides</i>	largemouth bass	√			N	E, N/T	E, N/T	N	E, N/T	Fuller	USGS
<i>Micropterus treculi</i>	Guadalupe bass	√							E, N/T	Fuller	USGS
<i>Misgurnus anguillicaudatus</i> *	Oriental weatherfish	√			E					Fuller	USGS, USM
<i>Moenkhausia sanctaefilomenae</i> *	redeye tetra	√			X					Fuller	USGS
<i>Monopterus albus</i> *	Asian swamp eel	√			E					Fuller	USGS, USM
<i>Morone chrysops</i>	white bass	√	√	√	E	E, N/T	E, N/T	E, N/T	E, N/T	Fuller	USGS
<i>Morone chrysops</i> x <i>M. mississippiensis</i>	white bass x yellow bass	√							X	Fuller	USGS
<i>Morone chrysops</i> x <i>M. saxatilis</i>	wiper	√	√	√	X	X	X	X	X	Fuller	USGS
<i>Morone mississippiensis</i>	yellow bass	√				E, N/T	N	N	N	Fuller	USGS
<i>Morone mississippiensis</i> x <i>M. saxatilis</i>	yellow bass x striped bass	√						X		Fuller	USGS
<i>Morone saxatilis</i>	striped bass	√	√	√	E, N/T	E, N/T	E, N/T	E, N/T	E	Fuller	USGS
<i>Morulus chrysophekadion</i> *	black sharkminnow	√			X					Fuller	USGS
<i>Moxostoma macrolepidotum</i>	shorthead redhorse	√				N	N		X, N/T	Fuller	USGS
<i>Nocomis leptocephalus</i>	bluehead chub	√			E	E, N/T	N	N		Fuller	USGS
<i>Notemigonus crysoleucas</i>	golden shiner	√			E, N/T	N	N	N	E, N/T	Fuller	USGS
<i>Notropis baileyi</i>	rough shiner	√			E, N/T	E, N/T	N			Fuller	USGS
<i>Notropis buccula</i>	smalleye shiner	√							X, N/T	Fuller	USGS
<i>Notropis chrosomus</i>	rainbow shiner	√				E, N/T				Fuller	USGS
<i>Notropis ludibundus</i>	sand shiner	√							N	Fuller	USGS
<i>Notropis oxyrhynchus</i>	sharpnose shiner	√							E, N/T	Fuller	USGS
<i>Notropis potteri</i>	chub shiner	√						E	E, N/T	Fuller	USGS
<i>Notropis shumardi</i>	silverband shiner	√					N	X, N/T	X, N/T	Fuller	USGS
<i>Notropis texanus</i>	weed shiner	√			N	E, N/T	N	N	N	Fuller	USGS
<i>Noturus gyrinus</i>	tadpole madtom	√			N	N	N	N	X, N/T	Fuller	USGS
<i>Oncorhynchus kisutch</i>	coho salmon	√	√	√					X	Fuller	USGS
<i>Oncorhynchus mykiss</i>	rainbow trout	√	√	√	X	X	X	X	X	Fuller	USGS
<i>Oncorhynchus tshawytscha</i>	chinook salmon	√	√	√				X	X	Fuller	USGS
<i>Oreochromis aureus</i> *	blue tilapia	√			E	X			E	Fuller	USGS,

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		FW	E	M	FL	AL	MS	LA	TX		
											USM
<i>Oreochromis mossambicus</i> *	Mozambique tilapia	√			E	X			E	Fuller	USGS, USM
<i>Oreochromis niloticus</i> *	Nile tilapia	√			E	X				Fuller	USGS
<i>Osmerus mordax</i>	rainbow smelt	√	√	√				X		Fuller	USGS
<i>Oxydoras niger</i> *	ripsaw catfish	√			X					Fuller	USGS
<i>Pangio kuhlii</i> *	coolie loach	√			X					Fuller	USGS
<i>Paralichthys albiguttata</i>	gulf flounder	√	√	√	N	N	N	N	E1, N/T	Fuller	USGS
<i>Paralichthys lethostigma</i>	southern flounder	√			N	N	N	N	X, N/T	Fuller	USGS
<i>Perca flavescens</i>	yellow perch	√			E	E	E		E	Fuller	USGS
<i>Perrunichthys perruno</i> *	leopard catfish	√							X	Fuller	USGS
<i>Phractocephalus hemiliopterus</i> *	redtail catfish	√			X					Fuller	USGS
<i>Piaractus mesopotamicus</i>	small-scaled pacu	√			X					Fuller	USGS
<i>Piaractus brachypomus</i> *	pirapatinga	√			X	X	X		X	Fuller	USGS
<i>Pimephales promelas</i>	fathead minnow	√			E	E, N/T	E, N/T	E, N/T	E, N/T	Fuller	USGS
<i>Pimephales vigilax</i>	bullhead minnow	√				N	N	N	E, N/T	Fuller	USGS
<i>Platax orbicularis</i> *	Pacific batfish			√	X					Fuller	
<i>Platydoras costatus</i> *	Raphael catfish	√			X					Fuller	USGS
<i>Poecilia formosa</i>	Amazon molly	√	√						E, N/T	Fuller	USGS
<i>Poecilia latipinna</i>	sailfin molly	√	√		N	N	N	N	E, N/T	Fuller	USGS
<i>Poecilia latipinna</i> * x <i>P. velifera</i> *	black molly	√			X					Fuller	USGS
<i>Poecilia latipunctata</i> *	broadspotted molly	√			X					Fuller	USGS
<i>Poecilia mexicana</i> *	shortfin molly	√							X	Fuller	USGS
<i>Poecilia petenensis</i> *	swordtail molly	√			X					Fuller	USGS
<i>Poecilia reticulata</i> *	guppy	√			E				E	Fuller	USGS
<i>Poecilia sphenops</i> *	liberty molly	√			E					Fuller	USGS
<i>Pogonias cromis</i>	black drum			√	N	N	N	N	X, N/T	Fuller	USGS
<i>Pogonias cromis</i> x <i>Sciaenops ocellatus</i>	black drum x red drum		√	√					X	Fuller	USGS
<i>Polydon spathula</i>	paddlefish	√			X	N	N	N	N	Fuller	USGS
<i>Pomoxis annularis</i>	white crappie	√			E	E, N/T	N	N	E, N/T	Fuller	USGS
<i>Pomoxis annularis</i> x <i>P. nigromaculatus</i>	crappie hybrid	√							X	Fuller	USGS
<i>Pomoxis nigromaculatus</i>	black crappie	√			N	N	N	N	E, N/T	Fuller	USGS
<i>Pseudotropheus sp.</i> *	African Lake cichlid	√							X	Fuller	USGS
<i>Pterodoras granulosus</i> *	granulated catfish	√			X					Fuller	USGS

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		FW	E	M	FL	AL	MS	LA	TX		
<i>Pterodoras sp.</i>	thorny catfish	√			X					Fuller	USGS
<i>Pterophyllum scalare</i> *	freshwater angelfish	√			X					Fuller	USGS
<i>Pterophyllum sp.</i> *	freshwater angelfish	√			X					Fuller	USGS
<i>Pterygoplichthys disjunctivus</i> *	vermiculated sailfin catfish	√			E					Fuller	USGS
<i>Pterygoplichthys multiradiatus</i> *	Orinoco sailfin catfish	√			E					Fuller	USGS
<i>Puntius conchonius</i> *	rosy barb	√			X					Fuller	USGS
<i>Puntius gelius</i> *	dwarf barb	√			X					Fuller	USGS
<i>Puntius schwanefeldii</i> *	tinfoil barb	√			X					Fuller	USGS
<i>Puntius tetrazona</i> *	tiger barb	√			X					Fuller	USGS, USM
<i>Pygocentrus nattereri</i> *	red piranha	√			X				X	Fuller	USGS, USM
<i>Pygocentrus/Serrasalmus sp.</i> *	unidentified piranha	√			X					Fuller	USGS
<i>Pyiodictis olivaris</i>	flathead catfish	√			E	N	N	N	N	Fuller	USGS
<i>Rhamdia quelan</i> *	bagre	√			X					Fuller	USGS
<i>Salmo salar</i>	Atlantic salmon	√	√	√			X		X	Fuller	USGS
<i>Salmo trutta</i> *	brown trout	√			X	X			X	Fuller	USGS
<i>Salvelinus fontinalis</i>	brook trout	√							E	Fuller	USGS
<i>Sarotherodon melanotheron</i> *	blackchin tilapia	√			E					Fuller	USGS, USM
<i>Scardinius erythrophthalmus</i> *	rudd	√				X			X	Fuller	USGS
<i>Sciaenops ocellatus</i>	red drum		√	√	N	N	N	N	X, N/T	Fuller	USGS
<i>Semotilus atromaculatus</i>	creek chub	√			N	N	N	N	X, N/T	Fuller	USGS
<i>Stizostedion canadense</i>	sauger	√			X	E, N/T	E, N/T	E, N/T	X	Fuller	USGS
<i>Stizostedion vitreum</i>	walleye	√				X, N/T	X	X	X	Fuller	USGS
<i>Telmatochromis bifrenatus</i> *	Lake Tanganyika dwarf cichlid	√			X					Fuller	USGS
<i>Tilapia mariae</i> *	spotted tilapia	√			E					Fuller	USGS, USM
<i>Tilapia sparrmannii</i> *	banded tilapia	√			X					Fuller	USGS
<i>Tilapia zillii</i> *	redbelly tilapia	√				X			E	Fuller	USGS, USM
<i>tilapine cichlids</i> *	unidentified tilapias	√			X		X	X	X	Fuller	USGS
<i>Tinca tinca</i> *	tench	√			X	X		X	X	Fuller	USGS
<i>Trichogaster leerii</i> *	pearl gourami	√			X					Fuller	USGS
<i>Trichogaster trichopterus</i> *	blue gourami	√			X					Fuller	USGS
<i>Trichopsis vittata</i> *	croaking gourami	√			E					Fuller	USGS,

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		FW	E	M	FL	AL	MS	LA	TX		
											USM
<i>Xiphophorus helleri</i> * x <i>X. maculatus</i> *	red swordtail	√			X					Fuller	USGS
<i>Xiphophorus helleri</i> * x <i>X. variatus</i> *	swordtail/platyfish	√			X					Fuller	USGS
<i>Xiphophorus hellerii</i> *	green swordtail	√			E				E	Fuller	USGS, USM
<i>Xiphophorus maculatus</i> *	southern platyfish	√			E				X	Fuller	USGS
<i>Xiphophorus maculatus</i> * x <i>X. variatus</i> *		√			X					Fuller	USGS
<i>Xiphophorus variatus</i> *	variable platyfish	√			E					Fuller	USGS

3.2 Amphibians

Scientific Name	Common Name	Aquatic Ecosystem			Reported (X), Established (E), Native (N), Native to one area of the state but transplanted to a non-native area (N/T)					Info Source	Summary Citation
		FW	E	M	FL	AL	MS	LA	TX		
<i>Ambystoma tigrinum mavortium</i>	barred tiger salamander	√							X, N/T	USGS	
<i>Atelopus zeteki</i> *	Panamanian golden frog	√			X					USGS	
<i>Bufo blombergi</i> *	Columbian giant toad	√			X					USGS	
<i>Bufo marinus</i>	giant marine toad	√			E				N	USGS	USM
<i>Cynops pyrrhogaster</i> *	Japanese fire-bellied salamander	√			X					USGS	
<i>Eleutherodactylus coqui</i> *	Puerto Rican coqui	√			E			E		USGS	USM
<i>Eleutherodactylus planirostris</i> *	greenhouse frog	√			E			E		USGS	USM
<i>Eleutherodactylus portoricensis</i> *	Puerto Rican robber frog	√			X					USGS	
<i>Hyla cinerea</i>	green treefrog	√			N	N	N	N	X, N/T	USGS	
<i>Hymenochirus boettgeri</i> *	Zaire dwarf clawed frog	√			X					USGS	
<i>Notophthalmus viridescens</i>	red spotted newt	√			X					USGS	
<i>Osteopilus septentrionalis</i> *	Cuban treefrog	√			E					USGS	USM
<i>Pachymedusa dacnicolor</i> *	Mexican leaf-frog	√			X					USGS	
<i>Rana catesbeiana</i>	bullfrog	√			E, N/T	N	N	N	E, N/T	USGS	
<i>Syrhophus cystignathoides campi</i>	Rio Grande chirping frog	√							X, N/T	USGS	
<i>Xenopus laevis</i> *	African clawed frog	√			X					USGS	

* = exotic

3.3 Reptiles

Scientific Name	Common Name	Aquatic Ecosystem			Reported (X), Established (E), Native (N), Native to one area of the State but transplanted to a non-native area (N/T)					Info Source	Summary Citation
		FW	E	M	FL	AL	MS	LA	TX		
<i>Apalone ferox</i>	Florida softshell	√			X, N/T	N				USGS	
<i>Caiman crocodilus</i> *	common caiman	√			X					USGS	USM
<i>Chelus fimbriatus</i> *	matamata	√			X					USGS	
<i>Chrysemys picta bellii</i>	western painted turtle	√			X					USGS	
<i>Chrysemys picta dorsalis</i>	southern painted turtle	√			X					USGS	
<i>Deirochelys reticularia chrysea</i>	Florida chicken turtle	√			X, N/T					USGS	
<i>Graptemys barbouri</i>	Barbour's map turtle	√			X, N/T	N				USGS	
<i>Graptemys kohnii</i>	Mississippi's map turtle	√			X		N	N	N	USGS	
<i>Graptemys ouachitensis</i>	Ouachita map turtle	√				X, N/T	N	N	N	USGS	
<i>Graptemys pseudogeographica</i>	false map turtle	√			X					USGS	
<i>Kinosternon scoriodes</i>	scorpion mud turtle	√			X					USGS	
<i>Nerodia fasciata pictiventris</i>	Florida water snake	√			N				X	USGS	
<i>Platemys platicephala</i> *	twistneck turtle	√			X					USGS	
<i>Podocnemis lewyana</i> *	Magdalena River turtle	√			X					USGS	
<i>Podocnemis sextituberculata</i> *	six-tubercled Amazon River turtle	√			X					USGS	
<i>Podocnemis unifilis</i> *	yellow spotted Amazon River turtle	√			X					USGS	
<i>Pseudemys concinna</i>	eastern river cooter	√							X	USGS	
<i>Pseudemys nelsoni</i>	Florida red-belly turtle	√			N				X	USGS	
<i>Trachemys dorbigni</i> *	Brazilian slider	√			X					USGS	
<i>Trachemys scripta callirostris</i> *	South American red-lined turtle	√			X					USGS	
<i>Trachemys scripta elegans</i>	red-eared slider	√			E	N	N	N	N	USGS	USM
<i>Trachemys stejnegeri malonei</i> *	central Antillean slider	√			X					USGS	

* = exotic

3.4 Mammals

Scientific Name	Common Name	Aquatic Ecosystem			Reported (X), Established (E)					Info Source	Summary Citation
		FW	E	M	FL	AL	MS	LA	TX		
<i>Myocastor coypus</i> *	nutria	√	√		E	E	E	E	E	USM	USM

* = exotic

4.0 PLANTS

4.1 Algae

Scientific Name	Common Name	Aquatic Ecosystem			Reported (X), Established (E)					Info Source	Summary Citation
		FW	E	M	FL	AL	MS	LA	TX		
<i>Caulerpa taxifolia</i>	a green tropical alga			√	X	X	X	X	X	Carlton	
<i>Cylindrospermopsis raciborskii</i> *	a blue-green alga	√			E					SJRWMD	
<i>Prionitis</i> sp.	a red alga			√					X	Carlton	

* = exotic

4.2 Vascular Plants

Scientific Name	Common Name	Aquatic Ecosystem			Reported (X), Established (E)					Info Source	Summary Citation
		FW	E	M	FL	AL	MS	LA	TX		
<i>Alternanthera philoxeroides</i> *	alligatorweed	√	√		E	E	E	E	E	NRCS, USGS	NRCS, IFAS, McCann
<i>Arundo donax</i> *	giant reed	√			E	E	E	E	E	NRCS, IFAS	NRCS, IFAS
<i>Bacopa egensis</i> *	Brazilian waterhyssop	√						E		IFAS	NRCS, IFAS
<i>Blyxa aubertii</i> *	blyxa	√						E		Thompson	NRCS
<i>Brachiaria mutica</i> *	paragrass	√			E	E			E	USGS	IFAS, McCann
<i>Ceratopteris thalictroides</i>	watersprite	√			E	E	E	E	E	USGS, Thompson	NRCS, McCann
<i>Colocasia esculenta</i> *	wild taro	√			E	E	E	E	E	NRCS, USGS	NRCS, IFAS, McCann
<i>Cyperus alopecuroides</i> *	foxtail flatsedge	√			E					USGS	NRCS
<i>Cyperus difformis</i> *	variable flatsedge	√			E	E	E	E	E	NRCS, IFAS	NRCS, IFAS
<i>Cyperus iria</i>	ricefield flatsedge	√			E	E	E	E	E	NRCS, IFAS	NRCS, IFAS

Scientific Name	Common Name	Aquatic Ecosystem			Reported (X), Established (E)					Info Source	Summary Citation
		FW	E	M	FL	AL	MS	LA	TX		
<i>Cyperus proflifer</i> *	dwarf papyrus	√			E					NRCS, USGS	NRCS
<i>Dopatrium junceum</i> *	dopatrium, horsefly's eye	√						E		Thompson	NRCS
<i>Egeria densa</i> *	Brazilian elodea, South American waterweed	√			E	E	E	E	E	NRCS, USGS	NRCS, McCann
<i>Eichhornia azurea</i> *(1)	anchored waterhyacinth	√			E					NRCS, McCann	NRCS, McCann
<i>Eichhornia crassipes</i> *	waterhyacinth	√			E	E	E	E	E	NRCS, USGS	NRCS, USGS, IFAS, McCann
<i>Hydrilla verticillata</i> *(1)	hydrilla, Florida elodea, water thyme, toothed waterweed	√	√		E	E	E	E	E	NRCS, USGS	NRCS, USGS, IFAS, McCann
<i>Hydrocleys numphoides</i> *	waterpoppy	√			E				E	USGS	NRCS
<i>Hygrophila polysperma</i> *(1)	Indian hygrophila, green hygro, Miramar weed	√			E				E	NRCS, USGS	NRCS, USGS, IFAS, McCann
<i>Hymenachne amplexicaulis</i>	West Indian marsh grass	√			E					NRCS, USGS	NRCS
<i>Ipomoea aquatica</i> *(1)	Chinese waterspinach	√			E					NRCS, USGS	NRCS, IFAS, McCann
<i>Iris pseudacorus</i>	yellow iris	√			E	E	E	E	E	NRCS, USGS	NRCS
<i>Limnophila indica</i>	Indian marshweed	√			E				E	USGS	NRCS
<i>Limnophila sessiliflora</i> *(1)	Asian marshweed	√			E				E	NRCS, USGS	NRCS, McCann
<i>Limnophila x ludoviciana</i>	hybrid of Indian and Asian marshweeds	√						E		Thompson	
<i>Ludwigia uruguayensis</i> * (Also <i>L. grandiflora</i> and <i>L. exapetala</i>)	Uruguay waterprimrose	√			E	E	E	E	E	USGS, Thompson	NRCS
<i>Lythrum salicaria</i> *	purple loosestrife	√				E	E	E	E	NRCS	NRCS
<i>Melaleuca quinquenervia</i> *(1)	melaleuca, Australian paperbark, punk tree	√	√		E		E	E		NRCS, USGS	NRCS, IFAS,

Scientific Name	Common Name	Aquatic Ecosystem			Reported (X), Established (E)					Info Source	Summary Citation
		FW	E	M	FL	AL	MS	LA	TX		
											McCann
<i>Murdannia keisak</i> *	marsh dewflower	√			E	E	E	E		NRCS, USGS	NRCS,
<i>Myriophyllum aquaticum</i> *	parrotfeather	√			E	E	E	E	E	NRCS, USGS	NRCS, IFAS, McCann
<i>Myriophyllum spicatum</i> *	Eurasian watermilfoil	√	√		E	E	E	E	E	NRCS, USGS	NRCS, USGS, IFAS, McCann
<i>Najas ancistrocarpa</i> *	needleleaf water nymph	√			E					McCann	NRCS, McCann
<i>Najas minor</i> *	brittle naiad	√			E	E	E	E		NRCS, USGS	NRCS
<i>Nasturtium officinale</i>	watercress	√			E	E	E	E	E	USGS	NRCS, McCann
<i>Nelumbo nucifera</i> *	sacred lotus	√			E	E	E	E		USGS	NRCS
<i>Nymphaea ampla</i>	dotleaf waterlily	√			E				E	USGS	NRCS
<i>Nymphaea blanda</i>	sleeping beauty waterlily	√			E					USGS	NRCS
<i>Nymphaea capensis</i> *	cape-blue waterlily	√			E					USGS	NRCS
<i>Nymphaea jamesoniana</i>	James waterlily	√			E					USGS	NRCS
<i>Nymphaea lotus</i> *	white Egyptian lotus	√			E			E		USGS	NRCS
<i>Nymphaea x daubeniana</i>		√			E					USGS	
<i>Nymphoides peltata</i> *	yellow floatingheart	√					E	E	E	USGS	NRCS
<i>Ottelia alismoides</i> *(1)	duck lettuce	√						E	E	Thompson	NRCS
<i>Panicum repens</i> *	torpedo grass	√			E	E	E	E	E	NRCS, USGS	NRCS, IFAS, McCann
<i>Pennisetum purpureum</i> *	Napier grass	√			E				E	NRCS, USGS	NRCS, IFAS, McCann
<i>Pistia stratiotes</i>	water lettuce	√	√		E		E	E	E	NRCS, USGS	NRCS, IFAS, McCann
<i>Potamogeton crispus</i> *	curly-leaved pondweed	√			E	E	E	E	E	NRCS, USGS	NRCS
<i>Sagittaria guyanensis</i>	Guyana arrowhead	√						E		NRCS, Thompson	NRCS
<i>Sagittaria montevidensis</i> *	long-lobed arrowhead	√			E	E	E	E		NRCS,	NRCS

Scientific Name	Common Name	Aquatic Ecosystem			Reported (X), Established (E)					Info Source	Summary Citation
		FW	E	M	FL	AL	MS	LA	TX		
										USGS	
<i>Salvinia minima</i>	water spangles	√	√		E	E	E	E	E	NRCS, USGS	NRCS, IFAS, McCann
<i>Salvinia molesta</i> *(1)	giant salvinia	√			E	E	E	E	E	NRCS, USGS	NRCS, USGS
<i>Scirpus cubensis</i>	burhead sedge	√			E					IFAS	IFAS
<i>Solanum tampicense</i> *(1)	wetland nightshade, aquatic soda apple	√			E					NRCS, USGS	NRCS, IFAS
<i>Spirodela punctata</i>	dotted duckweed	√			E	E	E	E	E	USGS	NRCS

* = exotic

1 = On the Federal Noxious Weed List as of June 7, 1999 (USDA/APHIS/PPQ. Part 360 – Noxious Weed Regulations. Authority: 7 U.S.C. 2803 and 2809; 7 CFR 2.17, 2.51 and 371.2(C)).

4.3 Semi-Aquatic Vascular Plants

Vascular Plants that Readily Grow in Estuarine and Riverine Riparian Habitats, Ditchbank Habitats, Coastal Hammocks, and Beach/Barrier Island Habitats

Scientific Name	Common Name	Aquatic Ecosystem			Reported (X), Established (E)					Info Source	Summary Citation
		FW	E	B	FL	AL	MS	LA	TX		
<i>Ardisia elliptica</i>	shoebutton ardisia			√	E					NRCS, FEPPC	NRCS, FEPPC
<i>Carica papaya</i> *	papaya	√			E					NRCS, Cox	NRCS
<i>Casuarina equisetifolia</i> *	horsetail Australian pine, beach sheoak		√	√	E					NRCS, McCann	NRCS, McCann
<i>Casuarina glauca</i> *	suckering Australian pine		√	√	E					NRCS, McCann	NRCS, McCann
<i>Colubrina asiatica</i>	latherleaf		√	√	E					NRCS, FEPPC	NRCS, FEPPC
<i>Cupaniopsis anacardioides</i> *	carrotwood	√	√		E					NRCS, IFAS	NRCS, IFAS
<i>Cyperus alternifolius</i> *	umbrella flat sedge	√			E			E	E	NRCS, IFAS	NRCS, IFAS
<i>Dioscorea alata</i> *	winged yam	√			E					NRCS,	NRCS,

Scientific Name	Common Name	Aquatic Ecosystem			Reported (X), Established (E)					Info Source	Summary Citation
		FW	E	B	FL	AL	MS	LA	TX		
										IFAS	IFAS
<i>Dioscorea bulbifera</i> *	air yam	√			E		E	E	E	NRCS, IFAS	NRCS, IFAS
<i>Imperata cylindrica</i> * (1)	cogon grass	√			E	E	E	E	X	NRCS, IFAS, Byrd	NRCS, IFAS
<i>Lygodium japonicum</i> *	Japanese climbing fern	√			E	E	E	E	E	NRCS, IFAS	NRCS, IFAS
<i>Lygodium microphyllum</i> *	old world climbing fern	√			E					NRCS, IFAS	NRCS, IFAS
<i>Macfadyena unguis-cati</i> *	catclaw vine	√			E			E	E	NRCS, IFAS	NRCS, IFAS
<i>Mimosa pigra</i> * (1)	catclaw mimosa	√			E				E	NRCS, McCann	NRCS, McCann
<i>Neyraudia reynaudiana</i> *	Burma reed; cane grass	√			E					NRCS, IFAS	NRCS, IFAS
<i>Paederia foetida</i> *	skunk vine	√			E			E	E	NRCS, IFAS	NRCS, IFAS
<i>Paspalum urvillei</i>	vasey grass	√			E	E	E	E	E	NRCS, IFAS	NRCS, IFAS
<i>Pueraria montana</i> *	kudzu	√			E	E	E	E	E	NRCS, IFAS	NRCS, IFAS
<i>Sapium sebiferum</i>	Chinese tallow tree, popcorn tree	√	√		E	E	E	E	E	IFAS	IFAS
<i>Scaevola sericea</i>	half-flower, beach naupaka			√	E					NRCS, FEPPC	NRCS, FEPPC
<i>Schinus terebinthifolius</i> *	Brazilian pepper tree	√	√		E				E	NRCS, IFAS	NRCS, IFAS, McCann
<i>Sorghum halepense</i> *	Johnson grass	√			E	E	E	E	E	NRCS, IFAS	NRCS, IFAS
<i>Thespesia populnea</i> *	seaside mahoe, portia tree			√	E					NRCS, FEPPC	NRCS, FEPPC

* = exotic

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